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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,144	10/23/2003	John Justin Duigenan	GB920020097US1	9184
<div>7590 IBM Corporation IP Law Department 11400 Burnet Road Austin, TX 78758</div>				
			<div>EXAMINER TAYLOR, NICHOLAS R</div>	
			<div>ART UNIT 2141</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 05/18/2007</div>	<div>DELIVERY MODE PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/692,144	Applicant(s) DUIGENAN ET AL.	
	Examiner Nicholas R. Taylor	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-10 have been examined and are rejected.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 2, 7, 8, and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claims 1, 2, and 10, the claimed language would reasonably be interpreted by one of ordinary skill in the art as a system of "software per se" and thus failing to fall within a statutory category of invention, because applicant's disclosure contains no explicit and deliberate definition for the term "means." In the context of the disclosure and claims in question, one of ordinary skill would reasonably interpret the "means" as a software application. As such, the system of "means" alone is not a machine, and it is clearly not a process, manufacture, or composition of matter. Thus, the claimed limitations are not limited to statutory subject matter and are therefore nonstatutory.

As to claims 7 and 8, the claimed language is directed to "program code" not embodied on a statutory medium and is thus directed to nonstatutory subject matter as being software per se.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omoigui (U.S. PGPub 2003/0126136) and Mane (U.S. PGPub 2003/0195964).

7. As per claims 1, 4, 7, and 10, Omoigui teaches a method for managing subscription requests in a multicast messaging system, the messaging system comprising

a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, (Omoigui, paragraphs 0347-0349 and fig. 7 and 11; multiple publishers via paragraphs 0355-0362)

the method comprising the steps of:

receiving a subscription request pointing to topic information in which the requesting subscriber is interested, the topic information defining a specific topic within

a topic hierarchy; (Omoigui, paragraphs 0386-0405, where a request defines topics and wildcards)

parsing said request to determine if said request includes a wildcard; and responsive to determining that said request does include a wildcard, for instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes said wildcard (Omoigui, e.g., topical requests with wildcards via paragraphs 0459-0490)

However, while Omoigui teaches the use of the multicast protocol (Omoigui, paragraph 0691-0697) and sending information messages associated with a topic hierarchy that precedes a wildcard (Omoigui, paragraphs 0386-0405), Omoigui fails to teach wherein the subscriber is instructed to listen on an associated multicast address.

Mane teaches a system with a central information broker (i.e., information intermediary) that serves information via multicast transmissions (Mane, paragraphs 0016-0018 and fig. 1). Mane's system looks for requests that include certain information and instructs the requesting subscriber to listen on a multicast address, where the address is associated with and based on the information contained in the request (Mane, paragraphs 0020, 0032, 0033, and 0036).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Omoigui and Mane to provide the multicast listening of Mane in the system of Omoigui, because doing so would improve the automatic and intelligent discoverability of search results desired in Omoigui's information system (Omoigui, paragraphs 0029-0031).

8. As per claims 2, 5, and 8, Omoigui-Mane teaches the system further comprising:  
assigning the multicast address to said preceding topic (Omoigui, see topic categorization of requests that are used preceding the wildcard demarcation e.g. in paragraphs 0472-0490 and Mane paragraphs 0032, 0033, and 0036).
9. As per claims 3, 6, and 9, Omoigui-Mane teaches the system further wherein the multicast address for the preceding topic is inherited from parent topic information (Omoigui, paragraphs 0386-0405 and 0472-0490).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes:

U.S. Patent No. 7,080,078, which describes a method of information distribution in a multicast system that labels based on multicast addresses;

U.S. Patent No. 6,789,077, which describes a system of fulfilling information request with address space-named results; and

U.S. Patent No. 6,862,594, which describes a method of flexible search criteria to discovery relevant services.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-


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3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas Taylor  
Examiner  
Art Unit 2141

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER